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#### REMARKS

Claims 23 and 49 are cancelled. Claims 1, 24, and 31 are amended herein. Claims 1-22, 24-48, 50-53 are currently pending. No new matter has been added by the amendment.

1. Claims 1, 2, 6, 13, 16, 18, 19, 20-24, 27, 31, 34, 40, 43, 45-51 and 53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,338,295 (Cornelius et al.) in view of U.S. Patent No. 5,674,276 (Andersen et al.). In supporting the rejection, the Examiner suggested:

Cornelius et al. discloses a catheter (10) comprising an elongate tubular member (12) having a proximal end, distal end, and a passageway defining a lumen (28) extending between the proximal and distal ends, said elongate tubular member comprising a braid (52) and an inner tubular liner (24) in coaxial relationship with the knit tubular member. Cornelius et al. discloses the braid which is woven in a "clothing weave" (column 2, lines 29-32). Webster's Ninth New Collegiate Dictionary defines weave: to form (cloth) by interlacing strands. Webster's defines knit: to form by interlacing yarn or thread in a series of connected loops with needles. Therefore a weaved braid is the same as a knit. Cornelius et al. further discloses an outer cover (22); a braid tubular member formed from metal wire (col 2, lines 29-30); a relatively stiff proximal segment and relatively flexible distal segment (col 3, lines 51-53); a knit tubular member comprised a metal alloy/stainless steel (col 2, line 29) having a generally circular cross-sectional shape (column 2, line 31); wherein at least one of the inner tubular liner and the outer tubular cover are radiopaque (36); a knit tubular member that is generally not radially expandable; an inner proximal liner (24) and an outer proximal cover (26); a braid interposed between the inner proximal liner and the outer proximal cover (fig. 2); a knit tubular member extending into the proximal segment (fig. 2).

Cornelius does not disclose a knit tubular member being formed from a plurality of interlocking loops. Andersen et al. does teach a knit tubular member being formed from a plurality of interlocking loops (fig 1a). It would have been obvious to one of ordinary skill in the art to modify the invention of Cornelius to include the knit formed from a plurality of interlocking loops as taught by Andersen et al. so that the knit has more structural integrity, therefore having a stronger wall but allowing flexibility.

Applicants respectfully disagree with the rejection for the following reasons.

#### A. Nonanalogous art is the antithesis of prima facie obviousness.

It is a settled legal principle that Section 103 nonobviousness requirement does not presume full knowledge of the inventor of prior art outside the field of his endeavor, i.e., of "nonanalogous" art. In re Winslow, 151 USPQ 48 (CCPA 1966).

The Cornelius device is a catheter used to access remote regions of the human body and, in doing so, delivering diagnostic or therapeutic agents to those sites. The Andersen device is a stent. It remains in the body to perform various functions, such maintain an opening of an esophagus or a blood vessel. They are two kinds of medical devices performing drastically different functions, and one cannot be substituted by the other. A person of ordinary skill in the art would not have looked to a stent to solve the problems treated by a catheter. Therefore, a prima facie case of obviousness has not been established in the first place.

#### B. The structures and utilities of the knit interlocking loops are different.

A knit tubular member of the present invention that is formed from a plurality of tightly knit interlocking loops and not radially expandable is absent in the Cornelius catheter. The interlocking loops in the Andersen prosthesis are <u>loosely</u> knit (column 4, lines 26 and 58). Such structure in Andersen is provided for the purposes of (a) allowing

the wall portion of the prosthesis to be expandable to a desired size by means of an internal expanding force (column 3, lines 18-19), (b) providing substantial open area to facilitate wrapping the prosthesis into small size for delivery intralumenally (column 4, lines 57-61), and (c) letting the loops be free to slide with respect to each other while in use in the body, therefore, enhancing the ability of the device to maintain its axial working length and resist migration when the prosthesis is locally radially compressed (column 5, lines 15-18).

On the contrary, claim 1 of the present Application as currently amended requires the interlocking loops to be <u>tightly</u> knit and the knit member to be <u>not radially expandable</u> (e.g., does not increase in diameter more than about 5% when an outwardly directed radial force is applied to an inner surface of the knit member) (see page 8, lines 16-20 of the Specification). The main function of the knit tubular member in the present invention is kink resistance (see page 3, lines 18-19 of the Specifications). Therefore, it is clear that the structures of the interlocking loops as well as the purposes for using them in the present invention are substantially different from those in the Andersen prosthesis. It should not have been obvious to one with ordinary skill in the art to modify the interlocking loops of the Anderson prosthesis and incorporate them into the Cornelius catheter body.

# C. References are not properly combinable or modifiable if their intended function is destroyed.

A 35 U.S.C. §103 rejection based upon a modification of a reference that destroys the intent, purpose or function of the invention disclosed in the reference is not proper and. the prima facie case of obviousness cannot be properly made. In short, there would be no technological motivation for engaging in the modification or change. To the contrary, there would be a disincentive. <u>In re Gordon</u>, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

As discussed above, if the interlocking loops in Andersen are modified to be tightly knit and not radially expandable as required by the amended claim 1 of the present Application, they will inhibit, rather than allowing the wall portion of the prosthesis to be

expandable. Neither will they be free to slide with respect to each other while in use in the body, therefore, decreasing, rather than enhancing, the ability of the prosthesis to maintain its axial working length and resist migration when the prosthesis is locally radially compressed. Again, a prima facie case of obviousness has not been made.

## D. The invention, including its advantages, should be viewed as a whole under 35 U.S.C. §103 review.

In asserting the differences between the prior art and the claims at issue under 35 U.S.C. §103, it is essential to view the claims at issue as "the invention as a whole." In so doing, it is legally improper to focus on the obviousness of substitutions and differences between the claimed invention and the prior art rather than on the obviousness of the claimed invention as a whole relative to the prior art. Hybritech, Inc. v Monoclonal Antibodies, Inc., 802 F.2d 1367, 1383, 231 USPQ 81, 93 (Fed. Cir. 1986), cert. den., 480 US 947 (1987) (emphasis added). It is impermissible to ignore the advantages, properties, utilities, and unexpected results flowing from the claimed invention; they are part of the invention as a whole. In re Chupp, 816 F.2d 643, 2 USPQ2d 1437 (Fed. Cir. 1987); Fromson v. Advance Offset Plate, 755 F.2d 1549, 225 USPQ 26 (Fed. Cir. 1985); In re Piasecki, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir 1984); Carl Schenck, A.G. v. Norton Corp., 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983); In re Sernaker, 702 F.2d 989, 217 USPQ 1 (Fed. Cir. 1983).

The present invention utilizes the concept of combining one or more polymeric tubes with a knit tube made of tightly knit interlocking loops. Such construction has the benefit of producing catheter sections that have small overall diameters but with exceptional strength, resistance to ovalization and kinking, and recovery from kinking (even in vivo) should such kinking occur. In addition, the catheter section of the present invention may be made in such a way that the wall is extraordinarily thin, particularly when compared to the walls of catheters having equal strength but made <u>solely</u> of polymeric materials.

Knit tubular members have been used in surgical devices, such as the one in Anderson. However, none of the references teaches a <u>combination</u> of polymeric tubing with a knit tubing made of tightly interlocked loops, resulting in improved flexibility and kink resistance. Therefore, the main advantages and unexpected results of the present invention are missing in the referenced prior art, but are part of the present invention that the Applicants respectfully request the Examiner to take into consideration.

E. There is no teaching, suggestion or incentive in the reference patents to combine their teachings.

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some <u>teaching</u>, <u>suggestion or incentive</u> supporting the combination. <u>In re Geiger</u>, 815 F.2d at 688, 2 USPQ2d at 1278 (Fed. Cir. 1987) (quoting <u>ACS Hospital Systems</u>, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir 1984)) (emphasis added).

Cornelius discloses a catheter comprising an elongated tubular member having a proximal end, distal end, and a passageway defining a lumen extending between the proximal and distal ends, said elongate tubular member comprising a braid and an inner tubular liner in coaxial relationship with the knit tubular member, which is woven in a "clothing weave." Cornelius does not disclose a knit tubular member being formed from a plurality of tightly knit interlocking loops.

On the other hand, Andersen et al. does teach a knit tubular member being formed from a plurality of interlocking loops. However, as discussed above, the interlocking loops in Andersen are loosely knit, for the purposes of (a) allowing the wall portion of the prosthesis to be expandable to desired size by means of an internal expanding force, (b)

providing substantial open area to facilitate wrapping the prosthesis into small size for delivery intralumenally, and (c) letting the loops be free to slide with respect to each other while in use in the body. The purpose of the tightly knit interlocking loops that are not radially expandable in the present invention is to improve the catheter's kink resistance and reduce the diameter of the catheter while providing the same strength as compared to a catheter made solely in polymeric material but with thicker walls. There is no teaching, suggestion or incentive found in Andersen that would lead a person with ordinary skill in the art to first tighten the interlocking loops in a prosthesis and then use them with a catheter in the same way as the present invention.

In light of the above discussion, the Applicants respectfully request the withdrawal of the rejection to claims 1, 24 and 31, as well as claims 2, 6, 13, 16, 18, 19, 20-22, 27, 34, 40, 43, 45-51 and 53 that depend directly or indirectly from them.

2. Claims 3-5, 7-9, 14-15, 17, 22, 25-26, 32-33, 35-37, 41-42, 44 and 52 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,338,295 (Cornelius et al.) in view of U.S. Patent No. 5,674,276 (Andersen et al.), and further in view of U.S. Patent No. 5,702,373 (Samson et al.). In support of the rejection, the Examiner stated:

Cornelius discloses all of applicant claims with the exception of a the [sic] knit tubular member comprised of super elastic alloy, nickel-titanium alloy, nitinol, platinum alloy, non-metallic material, or polymeric material; wherein the wire has a diameter of about .3 mil - 1.5 mil.; comprises a first strand made from a first material and a second made from a second material; an outer tubular cover

comprised of a material selected from the group consisting of polymide [sic], polyamide, polyethylene, polypropylene, polyvinyl chloride, including PTFE, FEP, Nylon, polyether block amide, vinylidene flouride, and their mixtures, alloys, copolymers, and block copolymers; an inner tubular liner comprised of a material selected form the group consisting of polyethylene, flouropolymer, Nylon, polyether block amide, polyvinyl chloride (PVC), ethyl vinyl acetate (EVA), polyethylene terephthalate (PET), and their mixtures, alloys, and copolymers, and a coil interposed between the inner proximal liner and the outer proximal cover. Samson discloses a knit tubular member comprising a super elastic alloy (column 7, line 64), nickel-titanium alloy (column 8, lines 10-12), nitinol (column 8, lines 10-12), platinum alloy (column 12, lines 6-7), non-metallic material (column 12, lines 10-12), polymeric material (column 12, line 10-12); wherein the wire has a diameter of about .3 mil - 1.5 mil (column 11, lines 60-62); comprises a first strand made from a first material and a second made from a second material (column 11, lines 28-32); an outer tubular cover comprised of polyethylene (column 10, line 36), polyvinyl chloride (column 10, line 49); and an inner tubular liner comprised of polyethylene (column 10, line 27), PVC (column 10, line 27), EVA (column 10, line 28), PET (column 10, line 28); and a coil (282) interposed between the inner proximal liner and the outer proximal cover. It would have been obvious to one having ordinary skill in the art to modify the catheter of Cornelius et al. in view of Andersen et al. to use the above mentioned materials and diameter of wire as taught by Samson to help prevent kinking of the catheter tube.

Applicants respectfully disagree. Samson discloses a composite super-elastic alloy braid reinforced catheter having a braided ribbon (Figures 2-12). It does not show or suggest a knit member having a plurality of tightly knit interlocking loops that are not radially expandable as set forth in the present claims. As discussed above, the primary reference does not teach the invention as claimed and the secondary references fail to remedy the basic lacking of the primary reference. Reversal of the rejections is therefore

requested.

3. Claims 10-12, 28-30, 38-39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,338,295 (Cornelius et al.) in view of U.S. Patent No. 5,674,276 (Andersen et al.), and further in view of U.S. Patent No. 5,702,373 (Samson et al.) as applied to claims 3-5, 7-9, 14-15, 17, 22, 25-27, 32-37, 41-42, 44, and further in view of U.S. Patent No. 5,549,109 (Samson et al). In support of the rejection, the Examiner stated:

Cornelius et al. in view of Samson teach all the elements of applicant's claims with the exception of a knit tubular member comprised of a multi filament wire. Samson et al. discloses multi filament tubes (302) that are woven (column 9, 65-67). It would have been obvious to one having ordinary skill in the art to modify the catheter of Cornelius et al. in view of Andersen et al., and further in view of Samson to use a multi filament wire as taught by Samson et. al to improve kinking resistance. Samson discloses the use of stainless steel, platinum and nitinol as the material for the wire. Therefore it would have also been obvious to use stainless steel and platinum or material selected from the group consisting of stainless steel, platinum, and nitinol as the material for the multi filament wire to improve kinking resistance.

First of all, since claims 1, 24 and 31 as amended are submitted as patentable for the reasons stated above, and claims 10-12, 28-30 and 38-39 depend directly or indirectly upon claims 1, 24 and 31 respectively, rejection to these claims should be withdrawn as well.

Furthermore, Samson ('373) discloses a composite super-elastic alloy braid reinforced catheter having a braided ribbon (FIGS. 2-12). Samson ('109) discloses a catheter having a woven section (FIG. 4). Neither of the Samson references discloses,

teaches or suggests a knit tubular member formed from a plurality of tightly knit interlocking loops. Neither of these secondary references remedies the fundamental deficiencies of the primary references as listed above. Applicants find it difficult to understand how the filament wire made of stainless steel, platinum or nitinol and used in a woven braid of a catheter would have rendered it obvious to one having ordinary skill in the art to use the same filament wire to form interlocking loops for another catheter, if such person of ordinary skill in the art has not come up with the idea of tightly knit interlocking loops for a catheter in the very beginning.

In view of the foregoing, claims 1-22, 24-48 and 50-53 are submitted as patentable over Cornelius et al., Andersen et al. and Samson et al. and the prior art of record.

Accordingly, favorable reconsideration and allowance of this patent application is requested.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no.

290252021800. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

November 5, 1999 Dated: By:

> Jingming Cai Registration No. P-44,579

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'braid 'braid vt [ME breyden to move suddenly, snatch, plait, fr. OE bregdan; akin to OHG brettan to draw (a sword)] (bef. 12c) 1 a: to make from braids (~ a rug) b: to form (three or more strands) into a braid 2: to do up (the hair) by interweaving three or more strands 3: MIX, INTERMINGLE (~ fact with fiction) 4: to ornament esp. with ribbon or braid — braid er n

<sup>2</sup>braid n (1530) 1 a: a length of braided hair b: a cord or ribbon having usu. three or more component strands forming a regular diagonal pattern down its length; esp: a narrow fabric of intertwined threads used esp. for trimming 2: high-ranking naval officers

braid•ed adj (15c) 1 a: made by intertwining three or more strands b: ornamented with braid 2: forming an interlacing network of channels ⟨a ~ river⟩

braid ing \'brā-din\ n (15c): something made of braided material brail \'brā(\(\pi\))\\ n [ME brayle, fr. AF braiel, fr. OF, strap] (15c) 1: a rope fastened to the leech of a sail and used for hauling the sail up or in 2: a dip net with which fish are hauled aboard a boat from a purse seine or trap

<sup>2</sup>brail vt (1625) 1: to take in (a sail) by the brails 2: to hoist (fish) by means of a brail

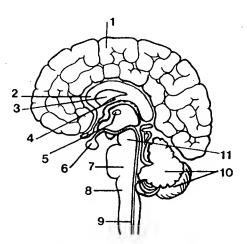
braille \'bra(\(\pi\))\\ n, often cap [Louis Braille] (1853): a system of writing for the blind that uses characters made up of raised dots — braille vt — braill-ist \'bra-list\\ n

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### BEST AVAILABLE COPY braille alphabet

**braille-writ-er** \-, rī-tər\ n, often cap (1942): a machine for writing braille

¹brain \'brān\ n [ME, fr. OE brægen; akin to MLG bregen brain, and perh. to Gk brechmos front part of the head (bef. 12c) 1 a: the portion of the vertebrate central nervous system that constitutes the organ of thought and neural coordination, includes all the higher nervous centers receiving stimuli from the sense organs and interpreting and correlating them to formulate the motor impulses, is made up of neurons and supporting and nutritive structures, is enclosed within the skull, and is continuous with the spinal cord through the foramen magnum **b**: a nervous center in invertebrates comparable in position and function to the vertebrate brain 2 a (1): INTELLECT, (2): intellectual endowment INTELLIGENCE — often used in pl.  $\langle \text{plenty of } \sim s \text{ in that family} \rangle \mathbf{b}(1) : \mathbf{a}$ very intelligent or intellectual narcon



brain 1a: 1 cerebral hemisphere, 2 corpus callosum, 3 ventricle, 4 fornix, 5 thalamus, 6 pituitary gland, 7 pons, 8 medulla oblongata, 9 spinal cord, 10 cerebellum, 11 mid-

**2 a** : a sudde brain-stormnique that i members of brains trust > brain•teas•er mental effort brain trust z cerned esp. v brain-wash-i (1950) 1:a political, soc trasting regir ship — **brai** brain wave n of voltage be current b:: **brainy** \'brā-r developed in 'braise \'braz OF breze, pro slowly in fat: <sup>2</sup>braise n (ca. 1**brake** \'brāk'  $^{2}$ brake n [MI : the common <sup>3</sup>brake n [ME, instrument of breaking up t ing, and form ⁴brake n [ME with one kinc **brake** *n* [perl ing or preven 2: something terest rates as <sup>6</sup>brake *vb* bral 1: to operate 2: to become brake·man \'t member who man on a bob bram·ble \'bra brooml (bef. ] rose family i: rough prickly bran \'bran\ n al grain separ: ¹branch \'bran paw] (14c) 1 shoot or stem : something th **a** (1): a strear (2) Southern & projection (as matical curve a program dec family descen edge that may ~ of medicinbut dependent inclusive than guage family ləs\ *adj* — bræ

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Brab-man or Brah-min \bra-mən: 2 is 'bra-, 'bra-, 'bra-\ n [ME Brag-man inhabitant of India, fr. L Bracnianus, fr. Gk Brachman, fr. Skt brāhmana of the Brahman caste, fr. brahman Brahman [15c] 1 a : a Hindu of the highest caste traditionally assigned to the priesthood b: 'BRAHMA 2 2 : any of an Indian breed of humped cattle: ZEBU; esp: a large vigorous heat-resistant and tick-resistant sus. silvery gray animal developed in the southern U.S. from the zebu 3 usu Brahmin: a person of high social standing and cultivated intellect and taste (Boston ->) — Brah-man-le \bra-'ma-nik\ or Brah-man-l-cal \-ni-kəl\

Brah·man·ism \'brā·mə-,ni-zəm\ n (1816): orthodox Hinduism adhering to the pantheism of the Vedas and to the ancient sacrifices and fam-

ily ceremonies
braid \bar i [ME breyden to move suddenly, snatch, plait, fr. OE
bregdan; akin to OHG brettan to draw (a sword)] (bef. 12c) 1 a: to
make from braids (\sigma a rug) b: to form (three or more strands) into
a braid 2: to do up (the hair) by interweaving three or more strands
3: MIX, tNTERMINGLE (\sigma fact with fiction) 4: to ornament esp. with
ribbon or braid — braid-er n

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nets (a  $\sim$  [1907] braid-ling (15c): something made of braided material 'brail ('brai(a))( n [ME brayle, fr. AF braiel, fr. OF, strap] (15c) 1: a rope fastened to the leech of a sail and used for hauling the sail up or in 2: a dip net with which fish are hauled aboard a boat from a purse

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2brail vt (1625) 1: to take in (a sail) by the brails 2: to hoist (fish) by means of a brail

braille \"brā(a)\"\ n, often cap [Louis Braille] (1853): a system of writing for the blind that uses characters made up of raised dots — braille vt — braillelst \"brā-list\" n

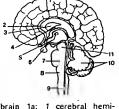
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braille alphabet

braille-writ-er \-iri-tər\ n. often cap (1942): a machine for writing 'brain \'bran\ n [ME, fr. OE brægen;

brain 'bran' n [ME, Ir. OE brægen; akin to MLG bregen brain, and perh. to Gk brechmos front part of the head] (bef. 12c) 1 a: the portion of the vertebrate-central nervous system that constitutes the organ of thought and neural coordination, includes all the higher nervous centers receiving stimuliteront because organs and interpret. higher nervous centers receiving stimu-li from the sense organs and interpret-ing and correlating them to formulate the motor impulses, is made up of neu-rons and supporting and nutritive structures, is enclosed within the skull, and is continuous with the spinal cord through the foramen magnum b: a

through the foramen magnum b: a nervous center in invertebrates comparable in position and function to the vertebrate brain 2 a (1): INTELLECT. MIND (2): intellectual endowment: INTELLIGENCE — often used in pl. (plenty of ~s in that family) b (1): a very intelligent or intellectual person (2): the chief planner of an organization or enterprise — usu. used in pl. 3: something that performs the functions of a brain. (10 cerebellum, 11 midbrain v1 (14c) 1: to kill by smashing the skull 2: to hit on the head brain-case \bar brain v1 (14c) 1: to kill by smashing the skull 2: to hit on the head brain-case \bar brain v1 (14c) 1: a massive reef-building coral (as genus Maeandra) having the surface covered by ridges and furrows brain death n (1964): final cessation of activity in the central nervous system esp. as indicated by a flat electroencephalogram for a predetermined length of time — brain-dead adj brain drain n (1963): the departure of educated or professional people from one country, economic sector, or field for another usu. for better pay or living conditions brained \bar brain and \alpha (15c): having a hrain of a specified kind — used in combination (featherbrained) brain a hat simulates the prothoracic glands 10 brain bormone n (1957): a hormone that is secreted by neurosecretory cells of the insect brain and that stimulates the prothoracic glands 10 nervous center in invertebrates compa-



brain 1a: 1 cerebral hemisphere, 2 corpus callosum, 3 ventricle, 4 fornix, 5 thalamus,

brain bormone n (1957): a hormone that is secreted by neurosecretory cells of the insect brain and that stimulates the prothoracic glands to secrete ecdysone

brain-l-ac \brain-ne-nk\ n [prob. fr. Brainiac, superintelligent villain in the Superman comic book series] (1982): a person characterized by unusual brainpower

brain-isb (brā-nish) adj (ca. 1530) archaic: tMPETUOUS, HOTHEADED (and in this ~ apprehension kills the unseen good old man —Shak.)

brain-less \brain-les\ adj (15c): devoid of intelligence: STUPID - brain-less-ly adv — brain-less-ness n brain-pan \brain-pan \n (14c): BRAINCASE | brain-pick-ling \pi-pi-kin \n (1954): the act of gathering information from another's mind — brain-pick-er \pk-kxr\n | ibrain-pow-er \pk-pa\(i-p)-kin \n (1878) 1: intellectual ability 2: people with developed intellectual ability 1: mentally disordered 2: arising from mental disorder (a \sim \frac{frenzy}{frenzy} — brain-sick\y adv | frenzy = frenzy = frenzy = frenzy = frenzy = frenz

brains trust n (1934) chiefly Brit: BRAIN TRUST
brain-teas-er \,\tilezar\n (1923): something (as a puzzle) that demands mental effort and aculty for its solution brain trust n (1910): a group of official or unofficial advisers concerned esp. with planning and strategy—brain trust-er \,\tilezar\n n (1923): something (as a puzzle) that demands mental effort and aculty for its solution to induce someone to give up basic political, social, or religious beliefs and attitudes and to accept contrasting regimented ideas: 2: persuasion by propagated or salesmanship—brain-wasb v—brainwasb v—brainw

or supplying the gills or associated structures of their embryonic particulars branchio-pod (bran-kē-o-pād) n [ultim. fr. Gk branchia gills + pod-pous foot — more at Foot] (1836): any of a group (Branchiopoda) d small usu. freshwater crustaceans (as fairy shrimp or water fleas) with usu. many pairs of setae-bearing appendages — branchlopod adj branch-let (branch-lot) n (ca. 1731): a small usu. terminal branch branch-line (-linh n (1846): a secondary line usu. of a railroad branch water n [¹branch (creek)] (1835): plain water brand (¹brand n [ME, torch, sword, fr. OE; akin to OE bærnan usum (branch) (bef. 12c) 1 a: a charred piece of wood b: FIREBRAND 1: something (as lightning) that resembles a firebrand 2: sword (1): a mark made by burning with a hot iron to altest manufacture of quality or to designate ownership (2): a printed mark made for similar purposes: TRADEMARK b (1): a mark put on criminals with a hot iron (2): a mark of disgrace: sTIGMA (the ~ of poverty) 4 a sicalss of goods identified by name as the product of a single firm of manufacturer: MAKE b: a characteristic or distinctive kind (a livel) of theater) 5: a tool used to produce a brand

\*brand w (15c) 1: to mark with strick and w (15c) 1: to impress in brand-ed n brand-ed n brand-ed n to shad n (1897) brandish \brandish \brandish \brandish \brandish \brandish \brandish \brandish \brandish \alpha \left[ 16 \] shake or wave (as a weaptentatious or aggressive manner \brandish \alpha (1599): an act or in brand-name \brandish \brandish \brandish \brandish \brandish \alpha (1599): \frac{1}{1} \text{and in man} \text{ \text{brandish} \text{ \text{brand}} \text{ \text{brand}} \text{ \text{and in hame}} \text{ \text{brand}} \text{ \text{bra

name (~ products) 2: having authors) brand name n (1922): TRADE n brand-new \-'nū, -'nyū\ adi [1]' and unused; also : recently intra brand-y \branding. The brandy in fr. MD brantwin, fr alcobolic beverage distilled fron brandy n brandied; brandy serve with brandy Brangus \brandings \br a:heedless of the consequences them all b: done in haste wit (~acts) 3 a: full of fresh raw hibitedly energetic or demonstra a: lacking restraint and discerning gressively self-assertive: IMPUDE:piercingly sharp: HARSH (a~x:contrast: BOLD (~colors) — b\*brash n [obs. E brash to breach a office)

Parash n [obs. E brash to breach a of ice)
brass \"bras\ n [ME bras, fr. OE 12c) 1: an alloy consisting esserpoportions 2 a: the brass instruen used in pl. b: a usu. brass it time, utensils, or ornaments diself-assurance: GALL 4 sing or p. of the military b: persons in his government) — brass adj bras-sard \bras-\sard, \"bra-\n" \n [F] tidle, fr. braccio arm, fr. L bracchi mor for protecting the arm — see

tiale, fr. braccio arm, fr. L bracchi mor for protecting the arm — see mor for protecting the arm — see wom around the upper arm usu.! brass band n (1834): a band con percussion instruments brass-bound \ \text{Prass-bound} \ \text{Prass-collar Democrat } n (1951): \text{South who votes the straight Democrase-rife, bras-so-\n n \text{brass-rife, bras-so-\n n \text{brass-rife, bras-so-\n n \text{brass-rife, bras-so-\n n \text{in informal ple hearty food \text{drass hat a fir.} the gold brald wor the brass

kCAMPER

brattle vi brat-tled; brat-tling (151:

or ratting sound

brat-wurst \brat-tled; brat-tling (151:

or ratting sound

brat-wurst \brat-tled; brat-tling (15n:

leasy if resh pork sausage for frying

brattle strength (Wurst), lit. Brunswick sausage for (Wurst), lit. Brunswick sausage for the brat-tled (Wurst), lit. Brunswick sausage for t

or shape by or as if ader n · OHG kneo knee, L : part of the human a, and patella; also he joint in the hind o the human knee vertebrate c: the r and tibia of an ina: a piece of timng structures comb: a rounded or amp-growing trees e knee 4: a blow knees: into a state end the knee to 2

act or practice of ip vt

s <~ in mud> b

E-HIGH

d to the knees <~

er a desk) for the

otable : AUTOMATde way ⟨∼ liber-

oduced by a light

ME knelen, fr. OE d the knee: fall or

ething (as a cush-

any joke, line, or

knellen to toll] vtknell  $\sim vi$  1: to sound in an om-

when rung slowly of the end or the opes>

ckerbocker, fictiton lrving] (1848) York; broadly: a - used as a nick-

1881) 1: loose= : UNDERPANTS small trivial arti-

fr. OE cny, perh. a cutting instru-

миди от the iviac-ca-bees \-'ma-kə-ıbēz\ n, pl Knights of cabees (1922): a member of a secret benevolent society Knight Templar n, pl Knights Templars or Knights Templar n 1: TEMPLAR 1 2: a member of an order of Freemasonry three orders in the York rite knish \ka-'nish\ n [Yiddish, fr. Pol knysz] (1916): a small in square of dough stuffed with a filling (as potato) and baked or fr 'knit \'nit\ vb knit or knit-ted; knit-ting [ME knitten, fr. OE akin to OE cnotta knot] vt (bef. 12c) 1 chiefly dial: to tie togeth : to link firmly or closely (knitted my hands) b: to cause to gether (time and rest will ~ a fractured bone) c: to contravinkles (knitted her brow) 3: to form by interlacing yarn of in a series of connected loops with needles ~ vi 1: to make fabrics or objects 2 a: to become compact b: to grow together : to become drawn together — knit-ter n <sup>2</sup>knit n (1596): KNIT STITCH; also: a knit fabric knit stitch n (ca. 1885): a basic knitting stitch usu. made with at the back of the work by inserting the right needle into the from of a loop on the left needle from the left side, catching the yar the point of the right needle, and bringing it through the firstle form a new loop — compare PURL STITCH **knit-ting** n (15c) 1: the action or method of one that knits: done or being done by one that knits **knit-wear** \'nit-war, -wer\ n (1926): knitted clothing knob \'nab\ n [ME knobbe; akin to MLG knubbe knob] (bef.: 2 : a rounded protuberance : LUMP b : a small rounded on the handle 2: a rounded usu. isolated hill or mountain -\'näbd\ adj — knob·by \'nä-bē\ adj knob·bly \'nä-b(ə-)lē\ adj (1859): having very small knobs (a tress> knob·ker·rie \'näb-,ker-ē\ n [Afrik knopkierie, fr. knop knob club] (1844): a short wooden club with a knob at one end missile or in close attack esp. by Zulus of southern Africa 🚜 knock \'näk\ vb [ME knoken, fr. OE cnocian; akin to MHG kn press] vi (bef. 12c) 1: to strike something with a sharp blow collide with something 3 a: BUSTLE (heard them ~ing around kitchen > b: WANDER < ~ed about Europe all summer > 4. a pounding noise b: to have engine knock 5: to find fault (1): to strike sharply (2): to drive, force, or make by or striking b: to set forcibly in motion with a blow 2: to call lide 3: to find fault with (always ~ing those in authority) cold: KNOCK OUT 2a(1) — knock dead: to move strongly. miration or applause (a comedian who really knocks them) knock for a loop 1 a: OVERCOME (knocked my opponent) b: DEMOLISH \(\langle knocked\) our idea for a loop\\ 2: DUMBFOUND (the news knocked them for a loop) — knock one's socks overwhelm or amaze one (a performance that will knock off) — knock together: to make or assemble esp. hurried makeshift way \( \langle knocked together my own bookcase \rangle \) 2knock n (14c) 1 a: a sharp blow: RAP, HIT (a loud ~ on the (1): a severe misfortune or hardship (2): SETBACK, REVE : a pounding noise b: a sharp repetitive metallic noise cause normal ignition in an automobile engine 3: a harsh and criticism (likes praise but can't stand the ~s) knock-about \'nä-kə-ıbaut\ adj (1880) 1: suitable for rough clothing 2 a: being noisy and rough: BOISTEROUS : characterized by boisterous antics and often extravagan ⟨ comedy ⟩ 3 of a sailing vessel: having a simplified present absence of bowsprit and topmast  $\langle a \sim sloop \rangle - knockal$ knock back vt (ca. 1931): DRINK, SWALLOW; specif: to to alcoholic beverage)

requency current

K-me-son \( \text{k\alpha} \cdot \) n (1951): KAON

knack \( \text{'nak\alpha} \) n (1951): KAON

knack \( \text{'nak\alpha} \) n (1962) 1 a: a clever trick or stratagem \( h: a \) clever way of doing something \( 2: a \) special ready capacity that is hard to analyze or teach \( 3 \) archaic: an ingenious device; broadly: TOY,

KNICKKNACK \( syn \) see GiFT

knack-er \( \text{'nak-ar'} \) n [prob. fr. E dial., saddlemaker] (1812) \( 1 \) Brit: a

buyer of wom-out domestic animals or their carcasses for use esp. as animal food or fertilizer 2 Brit: a buyer of old structures for their

constituent materials

knack-ered \'na-kərd\ adj [E slang knacker to kill, tire, perh. fr. knacker, n.] (1886) Brit: ππεd, exhausted

knacker, ii.] (1806) Brit: IRED, BARASTED knacker, ii.] (1806) Brit: IRED, BARASTED knackeurst var of KNOCKWURST

knap \'nap\ n [ME, fr. OE cnæp; akin to OE cnotta knot] (bef. 12c) 1 chiefly dial: a small hill

knap vi knapped; knap-ping [ME knappen, of imit. origin] (15c) 1 dial Brit: <sup>2</sup>RAP | 2: to break with a quick blow; esp: to shape (as flints) by breaking off pieces 3 dial Brit: SNAP, CROP 4 dial Brit: CHATTED— knappen.

flints) by breaking oil pieces 3 anal DTL: SNAT, CROT S and DTL: CHATTER — knap-per n
knap-saek \nap-sak\ n [LG knappsack or D knapzak, fr. LG & D
knappen to make a snapping noise, eat + LG sack or D zak sack] (1603):
a bag (as of canvas or nylon) strapped on the back and used for carrying supplies or personal belongings — knap-sacked \-sakt\ adj
knap-weed \-wed\ n/med / n [ME knopwed, fr. knop knop + wed weed] (15c):
any of various weedy centaureas; esp: a widely naturalized European
perennial (Centaurea nigra) with tough wiry stems and knobby heads
of purple flowers

(cypress ~) 3: the part of a garment covering the knee 4: a blow with the bent knee — kneed \ned \adj — to one's knees: into a state of submission or defeat
knee w kneed; knee-ing (bef. 12c) 1 archaic: to bend the knee to 2

to strike with the knee

: to strike with the knee knee breeches n pl (1833): BREECH 1a knee-cap \ne\_kap\n (1869): PATELLA knee-cap \ne\_kap\n (1869): PATELLA knee-cap ping \ne\_ka-pin\n (1974): the terroristic act or practice of maiming a person's knees (as by gunshot) — kneecap v knee-deep \'dep\ \odj (15c) 1 a: sunk to the knees \( \sim \) in mud\) h: deeply engaged or occupied \( \sim \) in work\( > 2: KNEE-HIOH knee-high \-\n'n\ adj (1743): rising or reaching upward to the knees \( \sim \) stockings\( > - \) knee-high\-\n'n\ n (1893): an open space (as under a desk) for the knees knees

knee-jerk \'nē-,jərk, -'jərk\ adj (1951) : readily predictable : AUTOMAT-IÇ (~ reactions); also : reacting in a readily predictable way (~ liber-

knee jerk n (1876): an involuntary forward kick produced by a light

blow on the tendon below the patella kneel \ne(a)\) vi knelt \ne(b) or kneeled; kneel \ne(b)\) vi knelt \ne(b) or kneeled; kneel \ne(b)\) to bend the knee: fall or cheowlian; akin to OE cheow kneel (bef. 12c): to bend the knee: fall or rest on the knees

rest on the knees
kneel-er \'nê-lər\'n (14c) 1: one that kneels 2: something (as a cushion or board) to kneel on knee-pan \'nê-pan\'n (15c): PATELLA

-slap-per \-sla-por\ n (1966): an extremely funny joke, line, or

story knee-sock \-, säk\ n (1964): a knee-high sock knell \-, nell\ vb [ME, fr. OE cnyllon; akin to MHG erknellen to toll] vt (bef. 12c): to summon or announce by or as if by a knell \( \sim vi \) 1: to ring esp. for a death, funeral, or disaster: TOLL 2: to sound in an om-

ring esp. for a death, funeral, or disaster: TOLL 2: to sound in an ominous manner or with an ominous effect 'knell n (bef. 12c) 1: a stroke or sound of a bell esp. when rung slowly (as for a death, funeral, or disaster) 2: an indication of the end or the failure of something (sounded the death ~ for our hopes) knew past of KNOW knick-er-bock-er \ni-ks(r)-,bā-kər\ n [Diedrich Knickerbocker, fictitious author of History of New York (1809) by Washington Irving] (1848) 1 cap: a descendant of the early Dutch settlers of New York; broodly: a native or resident of the city or state of New York — used as a nickname 2nd: KNICKERS name 2 pl : KNICKERS

name 2pl: KNICKERS
knick-ers \'ni-kərz\ n pl [short for knickerbockers] (1881) 1: loosefitting short pants gathered at the knee 2 chiefly Brit: UNDERPANTS
knie k-knaek \'nik-nak\ n [redupl. of knock] (1682): a small trivial article usu. intended for ornament
'knife \'nif\ n, pl knives \'nivz\ often attrib [ME knif, fr. OE cnif, perh.
fr. ON knifr; akin to MLG knif knife] (bef. 12c) 1 a: a cutting instru-

klutz \'kləts\ n [Yiddish klots, lit., wooden beam, fr. MHG kloz lumpy mass — more at clour] (1960): a clumsy person — klutz-l-ness \'klət-s-nəs\ n — klutzy \'klət-se\ adı klutzy \'klət-se\ nəs\ n — klutzy \'klət-se\ adı adı klutzy \'klət-se\ adı klutzy \'klət-se\ adı klutzy \'klət-se\

: SURGERY 4— usu. used in the phrase under the knife—knife, knife vb knifed; knife ing vr (1865) 1: to use a knife on; specifishing vb knife vb knifed; knife ing vr (1865) 1: to use a knife on; specifishing is to try to defeat by underhanded means 4: to move like knife 3: to try to defeat by underhanded means 4: to move like knife in (birds knifing the autumn sky) ~ vi: to cut a way with or with a knife blade (the cruiser knifed through the heavy seas) knife—edge \(\frac{1}{10}\) in (1818) 1: a sharp wedge of steel or other material used as a fulcrum for a lever beam in a precision instrum 2: a sharp narrow knifelike edge knife-point \(\bar{1}\)-point \(\bar{1}\) no (in 1911): the point of a knife — at knifer \(\frac{1}{10}\) tunder a threat of being knifed knight \(\frac{1}{10}\) in \(\frac{1}{

two pieces of cash some squares in one row and one square in a pendicular row over squares that may be occupied knight w (13c): to make a knight of knight-er-rant \n. pl knights-errant (14c): a knight eling in search of adventures in which to exhibit military skill, and the same state of the same skill, and the same state of the same skill, and the same state of the same state of the same skill, and the same state of the same skill, and the same skill same skill, and the same skill same skill same skill, and the same skill same skil

and generosity
knight-er-rant-ry \-'er-an-tre\ n, p/ knight-errantries (1654). knight-hood \\nit-hid\ n (13c) 1: the rank, dignity, or profession 1 knight 2: the qualities befitting a knight: CHIVALRY 3: knight class or body

knight 2: the qualities befitting a knight: CHIVALRY 3: knight class or body
knight with the add (14c) 1: of, relating to, or characteristic knight (tales of ~ adventures) 2: made up of knights—
knight (tales of ~ adventures) 2: made up of knights—
knight of Co-lum-bus \-k-"lam-bos\ n, pl Knights of Chirstopher Colum-bus \-k-"lam-bos\ n, pl Knights of Chirstopher Colum-bus \-k-"lam-bos\ n, pl Knights of Chirstopher Colum-bus \-k-"lam-bos\ n, pl Knights of Pythias (186)
member of a secret benevolent and fraternal order
Knight of Pyth-i-as \-'pi-thē-as\ n, pl Knights of Pythias (186)
member of a secret benevolent and fraternal order
Knight Templar n, pl Knights Templars or Knights Templars or Knights Templars (186)

1: TEMPLAR 1 2: a member of an order of Freemasonry confernt three orders in the York rite
knish \k-'nish\ n [Yiddish, fr. Pol knysz] (1916): a small round square of dough stuffed with a filling (as potato) and baked or in the with the intervention of the knit or knit-ted; knit-ting [ME knitten, fr. OE akin to OE cnotta knot] w (bef. 12c) 1 chiefy dial: to te together to knit stiffs (knitted my hands) h: to cause to good gether (time and rest will ~ a fractured bone) e: to contract wrinkles (knitted her brow) 3: to form by interlacing yarn or thin a series of connected loops with needles ~ vi 1: to make in a series of connected loops with needles ~ vi 1: to make in the back of the work by inserting the right needle into the figure of a loop on the left needle from the left side, catching the yill the point of the right needle, and bringing it through the first loof or a new loop — compare PURL STITCH
knit-ting n (15c) 1: the action or method of one that knits the first loof or by like knobbe, akin to MLG knubbe knobl (bef. 12d)
knob \'nab\ n [ME knobbe, akin to MLG knubbe knobl (bef. 12d)

knob-bly \nä-b(-p)i\(\text{a}\) di (1859): having very small knobs (a tress)
knob-ker-rie \näb-ker-\text{\nabla} (1859): having very small knobs (a tress)
knob-ker-rie \näb-ker-\text{\nabla} (1859): having very small knobs (a tress)
knob-ker-rie \näb-ker-\text{\nabla} (1859): having very small knobs (a tress)
knob-ker-rie \näb-ker-\text{\nabla} (1859): having very small knobs (a tress)
knock \näk\) de (Me knoken, fr. OE cnocian; akin to MHG knop press) vi (bef. 12c) 1: to strike something with a sharp blowing collide with something 3 a: BUSTLE (heard them \sim ing around kitchen) b: wANDER (\sim da bout Europe all summer) \( 4a \) in the strike sharply (2): to drive, force, or make by or significant of the striking h: to set forcibly in motion with a blow 2: to cause lide 3: to find fault with (always \sim ing those in authority) in cold: \$NOCK OUT 2a(1) \sim knock do: to move strongly miration or applause (a comedian who really knocks them knock for a loop 1 a: OVERCOME (knocked my opponeot) (in the news knocked them for o loop) \sim knock one's social overwhelm or amaze one (a performance that will knock off) \sim knock together: to make or assemble esp. hamkeshift way (knocked together my own bookcase)
knock n (14c) 1 a: a sharp blow: RAP, HIT (a loud \sim on the citicism (likes praise but can't stand the \sim s)
knock about \nabla \nabla knock do the can't stand the \sim s)
knock about \nabla \nabla knock back wi (ca. 1931): DRINK, SWALLOW; specif: to talcoholic beverage)

down \nāk-,daun\ adj (1690) 1: having or overwhelm (a bewildering assortmen. Krutcb) 2: that can easily be assembled or user ablow) that strikes down or overwhelms 3: shown in (1899) 1: the action of knocking ablow) that strikes down or overwhelms 3: shown that can be easily assembled or disasted down / 'daun\ w (15c) 1: to strike to the sharp blow: FELL 2: to dispose of (an literal sale 3: to take apart: DISASSEMBLE 4: slary: BARN (positions where they were able shown - Infantry Jour.) 5: REDUCE - Infantry Jour.) 5: REDUCE - Infantry Jour. 5: REDUCE - In

pregnant
wurst \\nak-(,)warst also -v\(\tilde{v}\)(r)st, sometimes
fir knacken to crackle (of imit. origin) + 1.

is short thick heavily seadsausage
vhol\ n [ME knol, fr. OE
akin to ON knollr mountain(bef. 12c): a small round hill

akin to ON know mountain.

(bef. 12c): a small round hill

form

by (ME, prob. alter. of knellen

the (13c) archaic: KNBLL

(bef. 12c): a usu. ornamental

knopped \( \gamma\_{min} \) (n/map\) (ac)

co OHG knoto knot] (bef. 12c)

it in interlacement of the parts of or more flexible bodies forming apport knob (as for fastening or together)

to OHG knoto sor (as tight constriction of the parts of or more flexible bodies forming apport knob (as for fastening or together)

to offer of a tight constriction of the sense of constriction of t protuberant lump or swelling me (a ~ in a gland) h: the inf a woody branch enclosed in them from which it arises; ofso action in the most of the loss of the loss of things: GROUP 6: a cluster that bow of ribbon: COCK-a: a division of the log's line to measure a ship's speed b one nautical mile per hour (2) nautical mile — not used tech

nautical mile per hour (2)
nautical mile — not used tech
to knot-ted; knot-ting vi
151; to tie in or with a knot
knots in 2: to unite closely
49; ENTANCIE 3: TIE
40; ENTANCIE 3: TIE
40

knot 1b: 1 Blackwall

rick bend, 3 clove to paw, 5 figure eigh knot, 7 bowline, 8 ov knot, 7 bowline, 8 ov 9 fisherman's bend, 11 square knot, 12 stevedore knot, 14 knot, 15 surgeon's kr head, 17 sheet band hitch, 19 seizing, 20 , 21 sheepshi